

**Amendments to the Specification:**

Please replace the paragraph at page 12, line 16 to page 13, line 8, with the following amended paragraph:

Non-naturally occurring halohydrin dehalogenases can be generated using known methods, including, for example, mutagenesis, directed evolution, and the like. Several illustrative methods are described hereinbelow. The enzymes can be readily screened for activity using the method described in Example 4. Such screening methods may also be readily applied to identifying other naturally occurring halohydrin dehalogenases. Suitable non-naturally occurring halohydrin dehalogenases include those corresponding to SEQ ID NOS: 24 (HHDH B-03), 26 (HHDH C-04), 28 (HHDH E-01), 30 (S01056858), 32 (HHDH 2G5), 34 (HHDH Mz1.1A5), 36 (HHDH cys1.10), 38 (HHDH cys2.12), 74 (HHDH B-12), 76 (HHDH Mz1/4H6), 78 (HHDH F-04), 80 (HHDH A-08), 82 (HHDH G9), 84 (HHDH F9), 86 (HHDH H10), 88 (HHDH A1), 90 (HHDH A-03), 92 (HHDH E-03), 94 (HHDH S00827801), 96 (HHDH S00890554), 98 (HHDH S00994580), 100 (HHDH S01018044), 102 (HHDH S01035939), 104 (HHDH S01009684), 106 (HHDH S00817219), 108 (HHDH S00708827), 110 (HHDH S00772501), 112 (HHDH S01035968), and 114 (HHDH S01040430). Exemplary polynucleotide sequences that encode these halohydrin dehalogenases include those corresponding to SEQ ID NOS: 23, 25, 27, 29, 31, 33, 35, 37, 73, 75, 77, 79, 81, 83, 85, 87, 89, 91, 93, 95, 97, 99, 101, 103, 105, 107, 109, 111, and 113, respectively. Additional non-naturally occurring halohydrin dehalogenases that are suitable for use in the practice of the present invention are provided in the patent application entitled, "Improved Halohydrin Dehalogenases and Related Polynucleotides," corresponding to Attorney Docket No. 0353.110US, filed on August 11, 2003, and assigned U.S. application serial number 60/494,382, and in the patent application entitled, "Improved Halohydrin Dehalogenases and Related Polynucleotides," corresponding to Attorney Docket No. 0353.210US, filed on February 18, 2004, and assigned U.S. application serial number [[\_\_\_\_\_] 60/546,033, both of which are incorporated herein by reference in their entireties.

Please replace the paragraph at page 21, line 21 to page 22, line 6, with the following amended paragraph:

Suitable non-naturally occurring ketoreductases can be readily identified by applying known methods, including mutagenesis, directed evolution, and the like, followed by screening for activity using the method described in Example 4. For example, these methods can be readily applied to naturally occurring ketoreductases, including the ones described herein. Exemplary non-naturally occurring ketoreductases are provided herein as SEQ ID NOS: 40 (KRED krh133c), 42 (KRED krh215), 44 (KRED krh267), 46 (KRED krh287), 48 (KRED krh320), 50 (KRED krh326), 52 (KRED krh408), 54 (KRED krh417), 56 (KRED krh483), 58 (KRED krh476), 60 (KRED krh495), 114 (KRED S01040430), 116 (KRED S01091361), 118 (KRED S01091625), and 120 (KRED S01094648). The polynucleotide sequences that encode them are provided herein as SEQ ID NOS: 39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59, 113, 115, 117, and 119, respectively. Additional non-naturally occurring ketoreductases that are suitable for use in the practice of the present invention are provided in the patent application entitled, "Improved Ketoreductase Polypeptides and Related Polynucleotides," corresponding to Attorney Docket No. 0190.110US/15077US01, filed on August 11, 2003, and assigned U.S. application serial number 60/494,195, and in the patent application entitled, "Improved Ketoreductase Polypeptides and Related Polynucleotides," corresponding to Attorney Docket No. 0190.210US/15077US02 and assigned U.S. application serial number 60/545,682, both of which are incorporated herein by reference in their entireties.

Please replace the paragraph at page 25, line 9 to page 25, line 25, with the following amended paragraph:

Non-naturally occurring glucose dehydrogenases may be generated using known methods, such as, for example, mutagenesis, directed evolution, and the like. GDH enzymes having suitable activity, whether naturally occurring or non-naturally occurring, may be readily identified using the assay described in Example 4. Exemplary non-naturally occurring halohydrin dehalogenases are provided herein as SEQ ID NOS: 62 (GDH 2313), 64 (GDH 2331), 66 (GDH 2279), 68 (GDH 2379), 122 (GDH S01024744), 124 (GDH S01052992), and 126 (GDH S01063714). The polynucleotide sequences that encode them are provided herein as SEQ ID NOS: 61, 63, 65, 67, 121, 123, and 125, respectively. Additional non-naturally occurring glucose dehydrogenases that are suitable for use in the practice of the present invention are provided in the patent application entitled, "Improved Glucose Dehydrogenase Polypeptides and Related Polynucleotides," corresponding to

Attorney Docket No. 0352.110US/15076US01, filed on August 11, 2003, and assigned U.S. application serial number 60/494,300, and in the patent application entitled, "Improved Glucose Dehydrogenase Polypeptides and Related Polynucleotides," corresponding to Attorney Docket No. 0352.210US/15076US02, filed on February 18, 2004, and assigned U.S. application serial number [[\_\_\_\_\_]] 60/545,657, both of which are incorporated herein by reference in their entireties.

Please replace the paragraph at page 63, line 13 to page 63, line 27, with the following amended paragraph:

An aqueous solution containing 25 mg/mL sodium cyanide at pH 7.2 was prepared at by dissolving 1.25 g NaCN and 4.2 g NaH<sub>2</sub>PO<sub>4</sub> in 50 mL of water. For each of Examples 32-36, 1 mL of the solution was charged to a 5 mL screw cap vial. Halohydrin dehalogenase powder (20 mg) was added to the vial, followed by 10 mg *tert*-butyl-(*S*)-6-chloro-5-hydroxy-3-oxo-hexanoate (Julich Fine Chemicals). The vial was capped and the reaction was stirred at room temperature for 12 hours. The reaction mixture was then extracted with 1 mL MTBE and the organic layer was analyzed by HPLC. In each Example, the [[*tert*-butyl (R)-6-chloro-5-hydroxy-3-oxohexanoate was completely reacted. ]] *tert*-butyl (R)-6-chloro-5-hydroxy-3-oxohexanoate was completely reacted. The polypeptide sequence of the halohydrin dehalogenase used for each Examples and the analyzed reaction yield of [[*tert*-butyl (R)-6-cyano-5-hydroxy-3-oxohexanoate]] *tert*-butyl (R)-6-cyano-5-hydroxy-3-oxohexanoate were as follows:

Example 32	SEQ ID No.106	25%
Example 33	SEQ ID No. 108	15%
Example 34	SEQ ID No. 32	15%
Example 35	SEQ ID No. 74	10%
Example 36	SEQ ID No. 110	10%